UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,478	03/19/2004	Richard G. Washington	232310	7220

52082 7590 09/02/2010
General Electric Company
GE Global Patent Operation
2 Corporate Drive, Suite 648
Shelton, CT 06484

EXAMINER	
HOLDER, ANNER N	
ART UNIT	PAPER NUMBER
2621	

NOTIFICATION DATE	DELIVERY MODE
09/02/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

gpo.mail@ge.com
allyson.carnaroli@ge.com

Office Action Summary	Application No.	Applicant(s)	
	10/804,478	WASHINGTON, RICHARD G.	
	Examiner	Art Unit	
	ANNER HOLDER	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 07/14/10.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11,25-27,29-32,60-76,78-86,88-100 and 102 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-11,25-27,29-32,60-76,78-86,88-100 and 102 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 09 April 2004 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/14/10 has been entered.

Response to Arguments

2. Applicant's arguments filed 01/07/10 have been fully considered but they are not persuasive. As to Applicant's arguments the Examiner respectfully disagrees. The cited references teach video transmission interface that has insufficient transmission capacity to transmit at least one digital data input stream without image compression. [fig. 1; fig. 2; ¶ 0016-0018; ¶ 0024-0026] The transmission of digital data by the interface takes into consideration the transmission line capacity where there is insufficient transmission capacity the system compensates and only transmits enough data. As it is clearly shown in Reese has the ability to transmitted uncompressed analog data. [fig. 1; fig. 2; ¶ 0016-0018; ¶ 0024-0026; system allows for bypassing image compression and/or digitization] The bandwidth is not unlimited as asserted by Applicant. The bandwidth is restricted by the mechanisms of the device such as the coax cable. [¶ 0012] Further the network disclosed by Reese is not limited to Ethernet. [¶ 0027] Reese teaches using

compression for local storage locally not for transmission and thus can be transmitted without compression via an optional bypass. [fig. 2] The cited references fairly suggest and teach the limitations as claimed.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1-11, 25-27, 29-33, 60-74, 76, 78-82, 84-86, 88-100, and 102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenoyer et al. (Kenoyer) US 2003/0048353 A1 in view of Reese et al. US 2002/0141732 A1 further in view of Togashi US 6,928,489 .

5. As to claim 1, Kenoyer teaches a method comprising: receiving at least one digital image data input stream from a video camera, said at least one digital image data input stream containing digital image information; [Figs. 3, 4, and 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040] creating at least two digital image data streams from said at least one digital image data input stream, each of said at least two digital image data streams comprising at least a portion of said digital image information; [Figs. 3, 4, and 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040] converting said at least two digital image data streams into at least two respective output image streams; [fig. 3; fig. 4; fig. 7; ¶ 0024-

0026; ¶ 0030] and providing said at least two respective output image streams for transmission together. [fig. 3; fig. 4; fig. 7; ¶ 0024-0026; ¶ 0030]

Kenoyer is silent as to determining a transmission capacity of a video transmission interface; comparing, via a processor, the transmission capacity of the video transmission interface with a capacity of said at least one digital image stream; transmission without compression the video transmission interface that has, based on the comparing, insufficient transmission capacity to transmit said at least one digital image input data stream without image compression.

Reese teaches transmission without compression the video transmission interface that has, based on the comparing, insufficient transmission capacity to transmit said at least one digital image input data stream without image compression. [fig. 1; fig. 2; ¶ 0016-0018; ¶ 0024-0026]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Reese with the device of Kenoyer allow for user flexibility in viewing and capacity for recording of events.

Kenoyer modified by Reese does not explicitly teach determining a transmission capacity of a video transmission interface; comparing, via a processor, the transmission capacity of the video transmission interface with a capacity of said at least one digital image stream.

Togashi teaches determining a transmission capacity of a video transmission interface; comparing, via a processor, the transmission capacity of the video

transmission interface with a capacity of said at least one digital image stream. [col. 4 lines 16-28]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transmission capacity teachings of Togashi with the device of Kenoyer (modified by Reese) allowing for improved image quality.

6. As to claim 2, Kenoyer (modified by Reese and Togashi) teaches a providing said at least two respective output image streams for transmission together without compression from a said video camera across said transmission interface to a device, wherein said device is at least one of a digital video recorder and a display device; [Kenoyer - Fig. 1; Fig. 5; ¶ 0023; ¶ 0039-0040; Reese - fig. 1; fig. 2; ¶ 0016-0018; ¶ 0024-0026] wherein said at least one input digital image data stream has a first data content; [Kenoyer - ¶ 0012; ¶ 0038-0039; Figs. 3-5; Reese - fig. 2; ¶ 0024-0026] wherein said at least two respective output image streams each has a data content less than said first data content, [Kenoyer - ¶ 0012; ¶ 0038-0039; Figs. 3-5] and wherein said interface has sufficient transmission capacity to transmit each of said at least two respective output image streams. [Reese - fig. 1; fig. 2; ¶ 0016-0018; ¶ 0024-0026]

7. As to claim 3, Kenoyer (modified by Reese, and Togashi) teaches an analog transmission interface, wherein said at least two respective output image streams comprise at least two respective analog image output streams; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and wherein said method further comprises: converting said at least two digital image data streams into said at least two respective analog image output streams; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and providing said at least two

respective analog image output streams for transmission without compression across said video transmission interface. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026]

8. As to claim 4, Kenoyer (modified by Reese, and Togashi) teaches one of said at least two respective analog image output streams comprises a first image having a first resolution and a first frame rate; [Kenoyer – ¶ 0012; ¶ 0038-0039; Figs. 3-5] wherein another of said at least respective analog image output streams comprises a second image having a second resolution and a second frame rate; [Kenoyer – ¶ 0012; ¶ 0038-0039; Figs. 3-5; Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and wherein at least one of: said first and second resolutions are different, or said first and second frame rates are different, or said first image comprises a different portion of said digital image data input stream than said second image, or a combination thereof. Kenoyer – ¶ 0012; ¶ 0038-0039; ¶ 0043; Figs. 3-5; fig. 7]

9. As to claim 5, Kenoyer (modified by Reese, and Togashi) teaches at least one digital image data input stream comprises a digital video signal received from a digital video source; [Kenoyer – ¶ 0025; ¶ 0038; Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and wherein said method further comprises providing each of said at least two respective analog image output streams as part of an analog video signal for transmission across said analog transmission interface. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026]

10. As to claim 6, Kenoyer (modified by Reese) teaches receiving said at least two respective analog image output streams as part of said analog video signal from across said analog transmission interface; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026]

converting each of said at least two received respective analog image output streams into at least one digital image data stream comprising said first image and into at least one digital image data stream comprising said second image; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and at least one of displaying or storing said respective first and second images, or a combination thereof. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026; Kenoyer - fig. 4]

11. As to claim 7, Kenoyer (modified by Reese and Togashi) teaches first and second frame rates are different and wherein said method further comprises displaying said first image at said first frame rate while simultaneously displaying said second image at said second frame rate. [Kenoyer – fig. 5; ¶ 0039-0041]

12. As to claim 8, Kenoyer (modified by Reese and Togashi) teaches first and second resolutions are different and wherein said method further comprises displaying said first image at said first resolution while simultaneously displaying said second image at said second resolution. [Kenoyer – fig. 5; ¶ 0039-0041]

13. As to claim 9, Kenoyer (modified by Reese, and Togashi) teaches creating comprises using scaling to create said first image as a zoomed image prior to said step of converting said at least two digital image data streams into said at least two respective analog image output streams; [Kenoyer – fig. 5; ¶ 0039-0041; ¶ 0012; Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] wherein said second image is not a zoomed image; [Kenoyer – fig. 5; ¶ 0039-0041; ¶ 0012] and wherein said step of displaying comprises displaying said zoomed first image while simultaneously displaying said second

unzoomed image. zoomed first image while simultaneously displaying said second unzoomed image. [Kenoyer – fig. 5; ¶ 0039-0041; ¶ 0012; ¶ 0026]

14. As to claim 11, Kenoyer (modified by Reese and Togashi) teaches said video transmission interface comprises a digital transmission interface. . [Kenoyer - fig. 3; ¶ 0028; Fig. 4; fig. 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040; Reese - fig. 2; ¶ 0024-0026]

15. As to claim 25, Kenoyer (modified by Reese) teaches receiving digital image data from a video camera; [abstract; figs. 1-4] processing said digital image data in a first processing operation to create first processed image data; [figs. 7-8; ¶ 0043-0047] processing said digital image data in a second processing operation to create second processed image data; [figs. 7-8; ¶0043-0047] providing said first and second processed image data for communication together [fig. 3; ¶ 0028; Fig. 4; fig. 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040] wherein at least one of: said first processed image data has an image resolution that is different from an image resolution of said second processed image data, or said first processed image data is provided for video transmission communication across said interface at an image frame rate that is different from an image frame rate at which said second processed image data is provided for communication from said video camera across said video transmission interface, or said first processed image data comprises a different portion of said digital image data than said second processed image data, or a combination thereof. [fig. 5; ¶ 0039-0041]

Kenoyer is silent as to transmission without compression the video transmission interface that has, based on the comparing, insufficient transmission capacity to transmit said at least one digital image data input stream without image compression.

Reese teaches transmission without compression a video transmission interface that has insufficient transmission capacity to transmit said at least one digital image data input stream without image compression. [fig. 1; fig. 2; ¶ 0016-0018; ¶ 0024-0026]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Reese with the device of Kenoyer allow for user flexibility in viewing and capacity for recording of events.

Kenoyer modified by Reese does not explicitly teach determining a transmission capacity of a video transmission interface; comparing, via a processor, the transmission capacity of the video transmission interface with a capacity of said at least one digital image stream.

Togashi teaches determining a transmission capacity of a video transmission interface; comparing, via a processor, the transmission capacity of the video transmission interface with a capacity of said at least one digital image stream. [col. 4 lines 16-28]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the transmission capacity teachings of Togashi with the device of Kenoyer (modified by Reese) allowing for improved image quality.

16. As to claim 26, Kenoyer (modified by Reese, and Togashi) teaches receiving said first and second processed image data together from across said one or more interfaces; [Kenoyer - fig. 3; ¶ 0028; Fig. 4; fig. 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040] and displaying or storing said first and second processed image data. [Kenoyer - figs. 7-8; figs. 3-4; ¶ 0033; ¶ 0035; ¶ 0038]

17. As to claim 27, Kenoyer (modified by Reese, and Togashi) teaches wherein said video transmission interface comprises an analog transmission interface; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] wherein said method further comprises converting said first and second processed image data to respective first and second analog image information for communication together across said analog transmission interface; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and wherein said method further comprises converting said first and second analog image information back into said respective first and second processed image data after receiving said first and second analog image information from across said analog transmission interface. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026]

18. As to claim 29, Kenoyer (modified by Reese and Togashi) teaches each of said first and second processing operations comprises at least one of an image scaling operation, an image windowing operation, an image deconstruction operation, or a combination thereof. . [Kenoyer - fig. 5; fig. 7; ¶ 0039-0043]

19. As to claim 30, Kenoyer (modified by Reese and Togashi) teaches each of said first processed image data and said second processed image data comprises a

windowed image, a scaled image, or a image tiled segment. . [Kenoyer - fig. 5; fig. 7; ¶ 0039-0043]

20. As to claim 31, Kenoyer (modified by Reese, and Togashi) teaches processing said digital image data in a third processing operation to create third processed image data; [Kenoyer - Figs. 3-5; figs. 7-8; ¶ 0012-0013; ¶ 0033; ¶ 0038-0041; ¶ 0043-0047] and wherein at least one of: said third processed image data has an image resolution that is different from an image resolution of said first and second processed image data, or said third processed image data is provided for communication across said common interface at an image frame rate that is different from image frame rates at which said first and second processed image data is provided for communication across said common interface, or said third processed image data comprises a different portion of said digital image data than said first and second processed image data, or a combination thereof. Kenoyer - fig. 5; ¶ 0039-0041]

21. As to claim 32, Kenoyer (modified by Reese and Togashi) teaches a digital transmission interface. [Kenoyer - fig. 3; ¶ 0028; Fig. 4; fig. 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040; Reese - fig. 2; ¶ 0024-0026]

22. As to claim 60, see discussion of claim 1 above.

23. As to claim 61, see discussion of claim 2 above.

24. As to claim 62, see discussion of claim 3 above.

25. As to claim 63, see discussion of claim 4 above.

26. As to claim 64, see discussion of claim 5 above.

27. As to claim 65, Kenoyer (modified by Reese, and Togashi) teaches multiple stream image processing circuitry comprises at least one window circuitry component, at least one image scaler circuitry component, and at least one image mux circuitry component; [Kenoyer - fig. 5; fig. 7; ¶ 0039-0043; signals are multiplexed as viewed in fig. 5 where two windows are displayed together] and wherein said at least one window circuitry component, at least one image scaler circuitry component, and at least one image mux circuitry component are operably coupled to create said at least two digital image data streams from said at least one digital data input stream, and to convert said at least two digital image data streams into said at least two respective output image streams. [Kenoyer - fig. 5; fig. 7; ¶ 0039-0043; signals are multiplexed as viewed in fig. 5 where two windows are displayed together; fig. 3; ¶ 0028; Fig. 4; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040]

28. As to claim 66, Kenoyer (modified by Reese, and Togashi) teaches multi-stream image processing circuitry further comprises at least one image deconstruction circuit component, at least one alignment data circuitry component, and at least one image mux circuitry component; [Kenoyer - fig. 5; fig. 7; ¶ 0039-0043; signals are multiplexed as viewed in fig. 5 where two windows are displayed together; ¶ 0011 ¶ 0013; ¶ 0028; ¶ 0036; ¶ 0042-0046] and wherein said at least one image deconstruction circuit component, at least one alignment data circuitry component, and at least one image mux circuitry component are operably coupled to create said at least two digital image data streams from said at least one digital data input stream, and to convert said at least two digital image data streams into said at least two respective output image

streams. [Kenoyer - Fig. 4; fig. 5; fig. 7; ¶ 0039-0043; signals are multiplexed as viewed in fig. 5 where two windows are displayed together; ¶ 0011-0013; ¶ 0028; ¶ 0036; ¶ 0033; ¶ 0038-0040; ¶ 0042 –0046]

29. As to claim 67, see discussion of claims 65 and 66 above.

30. As to claim 68, see discussion of claim 6 above.

31. As to claim 69, Kenoyer (modified by Reese, and Togashi) teaches a device coupled to said multiple image creation circuitry by said video transmission interface, said device configured to receive said at least two respective output image streams from across a said video transmission interface, wherein said device is at least one digital video recorder and a display device. [Kenoyer - Fig. 1; fig. 4; Fig. 5; ¶ 0023; ¶ 0039-0040; Reese - fig. 1; fig. 2; ¶ 0016-0018; ¶ 0024-0026]

32. As to claim 70, see discussion of claim 6 above.

33. As to claim 71, Kenoyer (modified by Reese, and Togashi) teaches a device coupled to said multiple image creation circuitry by said video transmission interface, by said analog transmission interface, said device comprises a PC-based digital video recorder configured to receive said at least two respective analog image output streams as part of said analog video signal from across said analog transmission interface; [Kenoyer – figs. 3-4; figs. 7-8; it is obvious that a processing unit that processes digital video is computer based and the video is recorded in memory, thus equates to a DVR; Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] convert each of said at least two received respective analog image output streams into at least one digital image data stream comprising said first image and into at least one digital image data stream comprising

said second image; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026; Kenoyer - figs. 1-4; ¶ 0028; Figs. 3, 4, and 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040]compress said at least one digital image data stream to form compressed image information; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] further transmit said compressed image information from said device to other viewing stations via local area network (LAN) or wide area network (WAN). [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026; ability to compress and/or digitize data]

34. As to claim 72, see discussion of claim 2 above.

35. As to claim 73, see discussion of claim 8 above.

36. As to claim 74, see discussion of claim 9 above.

37. As to claim 76, see discussion of claim 11 above.

38. As to claim 94, see discussion of claim 25 above.

39. As to claim 95, Kenoyer (modified by Reese, and Togashi) teaches image receiving circuitry configured to: receive said first and second processed image data together from across said video transmission interface; [Kenoyer - figs. 1-4; ¶ 0028; fig. 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040] and at least one of display or store said first and second processed image data on said device, wherein said device is at least one of a digital video recorder and a display device. [Kenoyer - figs. 1-4; ¶ 0012-0014; ¶ 0023-0025; ¶ 0030-0031; Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026]

40. As to claim 96, Kenoyer (modified by Reese, and Togashi) teaches interface comprises an analog transmission interface; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026; Kenoyer - Figs. 3, 4, and 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040] wherein said image

creation circuitry is further configured to convert said first and second processed image data to respective first and second analog image information for communication together across said analog transmission interface to said device; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026; Kenoyer - Figs. 3, 4, and 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040] and wherein said image receiving circuitry is further configured to convert said first and second analog image information back into said respective first and second processed image data after receiving said first and second analog image information from across said analog transmission interface. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026; Kenoyer - Figs. 3, 4, and 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040]

41. As to claim 97, see discussion of claim 28 above.

42. As to claim 98, see discussion of claim 29 above.

43. As to claim 99, see discussion of claim 30 above.

44. As to claim 100, see discussion of claim 31 above.

45. As to claim 102, Kenoyer (modified by Reese, and Togashi) teaches receiving said at least two respective analog image output streams at said device as part of said analog video signal from across said analog interface; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] converting each of said at least two received respective analog image output streams into at least one digital image data stream comprising said first image and into at least one digital image data stream comprising said second image; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] compressing said at least one digital image data stream in said device to form compressed image information; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and further transmitting said compressed image information from

said device to other viewing stations via a local area network (LAN) or a wide area network (WAN), [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0027] wherein said device comprises a digital video recorder. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026]

46. Claims 10, 78-82, and 84-86, 88-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenoyer et al. (Kenoyer) US 2003/0048353 A1 in view of Reese et al. US 2002/0141732 A1 in view of Togashi US 6,928,489 further in view of Russo US 7,113,654 B2.

47. As to claim 10, Kenoyer (modified by Reese, and Togashi) teaches digital image information comprises an original image; [Kenoyer - Figs. 3, 4, and 7; ¶ 0012-0013; ¶ 0033; ¶ 0038-0040] wherein said step of converting comprises converting said first and second digital image data streams into respective first and second analog image output streams; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] converting each of said received first and second analog image output streams into respective third and fourth digital image data streams [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and wherein said method further comprises: receiving said first and second analog image output streams as part of said analog video signal from across said analog transmission interface. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026]

Kenoyer (modified by Reese, and Togashi) does not explicitly teach creating comprises segmenting at least a part of said original image into at least a first image tile segment comprising a first portion of said original image in a first digital image data stream.

Russo teaches creating comprises segmenting at least a part of said original image into at least a first image tile segment comprising a first portion of said original image in a first digital image data stream. [fig. 1-2; col. 4 lines 61-67; col. 5 lines 11-25; col. 6 lines 8-10]

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Russo with the device Kenoyer (modified by Reese, and Togashi) allowing for improved coding efficiency.

48. As to claim 78, Kenoyer (modified by Reese, Togashi and Russo) teaches multiple stream image creation circuitry; and multiple stream image processing circuitry <u>determining a transmission capacity of a video transmission interface; comparing, via a processor, the transmission capacity of the video transmission interface with a capacity of said at least one digital image stream</u>, _[Togashi - col. 4 lines 16-28] said multiple stream image processing circuitry comprising at least one window circuitry component configured to extract a selected portion of an original higher resolution image frame from <u>the</u> digital data input stream to form a lower resolution windowed partial image, [Kenoyer - fig. 5; fig. 7; ¶ 0039-0043; signals are multiplexed as viewed in fig. 5 where two windows are displayed together; Russo - figs. 1-3; col. 5 lines 11-25; col. 6 lines 8-10] at least one image scaler circuitry component configured to scale the lower resolution windowed partial image, [Russo - figs. 1-3; col. 5 lines 11-25; col. 6 lines 8-10] at least one image deconstruction circuit component configured to segment an original image frame into two or more segmented higher resolution frames or tiled higher resolution images, at least one alignment data circuitry component configured to

insert at least one of tile identification information or horizontal alignment information or vertical alignment information into unused lines of said segmented higher resolution frames or tiled higher resolution images, [Russo - figs. 1-3; col. 5 lines 11-25; col. 6 lines 8-10, 21-43] and at least one image mux circuitry component configured to select either or both of said scaled lower resolution frames from said image scaler circuitry component or said higher resolution tile images from said alignment data circuitry component for transmission without image compression across a video transmission interface that has, based on the comparing, insufficient transmission capacity to transmit the digital image data stream without image compression. [Russo - figs. 1-3; col. 5 lines 11-25; col. 6 lines 8-10, 21-43; Reese - fig. 1; fig. 2; ¶ 0016-0018; ¶ 0024-0026]

49. As to claim 79, Kenoyer (modified by Reese, Togashi and Russo) teaches video transmission interface comprises an analog transmission interface; [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and wherein said multiple stream image creation circuitry further comprises conversion circuitry coupled between said multiple stream image processing circuitry and said analog transmission interface. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026]

50. As to claim 80, Kenoyer (modified by Reese) teaches a device including multiple stream image receiving circuitry coupled to said multiple image creation circuitry by said analog transmission interface, wherein said device is at least one of a digital video recorder and a display device. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026; Kenoyer - fig. 4]

51. As to claim 81, Kenoyer (modified by Reese, Togashi and Russo) teaches multiple stream image receiving circuitry comprises a frame grabber and multiple stream image processing circuitry. [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026; Kenoyer - Fig. 3]

52. As to claim 82, Kenoyer (modified by Reese, Togashi and Russo) teaches multi-stream image processing circuitry of said multiple stream receiving circuitry of said digital video recorder [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] comprises at least one image reconstruction circuit component configured to reconstruct said segment higher resolution frames or said tiled higher resolution images back into said original higher resolution imager based on said alignment information inserted by said alignment data circuitry component into said unused lines of said segmented higher resolution frames or tiled higher resolution images, [Kenoyer figs. 3-4; ¶ 0011-0013; ¶ 0028; ¶ 0036; ¶ 0033; ¶ 0038-0040; ¶ 0042-0046; Russo - figs. 1-3; col. 5 lines 11-25; col. 6 lines 8-10, 21-43] at least one compression circuitry component configured to compress image information received by said multiple stream receiving circuitry of said digital video recorder, [Reese - fig. 2; ¶ 0016-0018; ¶ 0024-0026] and at least one storage device component configured to store said compressed image information. [Kenoyer - figs. 3-4; ¶ 0011-0013; ¶ 0028; ¶ 0036; ¶ 0033; ¶ 0038-0040; ¶ 0042-0046]

53. As to claim 84, see discussion of claim 71 above.

54. As to claim 86, see discussion of claim 78 above.

55. As to claim 89, see discussion of claim 81 above.

56. As to claim 90, see discussion of claim 82 above.

57. As to claim 92, see discussion of claim 71 above.

58. Claim 83 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kenoyer et al. (Kenoyer) US 2003/0048353 A1 in view of Reese et al. US 2002/0141732 A1 in view of Togashi US 6,928,489 in view of Russo US 7,113,654 B2 further in view of Kobayashi et al. US 6,323,906 B1.

59. As to claim 83, Kenoyer (modified by Reese and Russo) teaches the limitations of claim 82.

Kenoyer (modified by Reese, Togashi and Russo) does not explicitly teach analog interface comprises a NTSC, PAL or SECAM interface.

Kobayashi teaches analog transmission interface comprises a NTSC, PAL or SECAM interface. [col. 3 lines 17-23]

It would have been obvious to one of ordinary skill in the art to combine the teachings of Kobayashi with the device Kenoyer (modified by Reese, Togashi and Russo) allowing for reception of various formats and used in combination improves image quality. [col. 1 lines 45-51]

60. As to claim 85, see discussion of claim 83 above.

61. As to claim 88, see discussion of claim 83 above.

62. As to claim 91, see discussion of claim 83 above.

63. As to claim 93, see discussion of claim 83 above.

Conclusion

64. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANNER HOLDER whose telephone number is (571)270-1549. The examiner can normally be reached on M-W, M-W 8 am-3 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on 571-272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anner Holder/
Examiner, Art Unit 2621

/Tung Vo/
Primary Examiner, Art Unit 2621